

MONITORING  
PURGING  
DISPOSING  
SAMPLING

**MPDS**

SERVICES, INCORPORATED

APPROVED

SEP 01 1995

TINA R. BERRY

RECEIVED

1:41 pm, Jun 08, 2009

Alameda County  
Environmental Health

MPDS-UN5487-07  
August 21, 1995

Unocal Corporation  
2000 Crow Canyon Place, Suite 400  
P.O. Box 5155  
San Ramon, California 94583

Attention: Ms. Tina R. Berry

RE: Quarterly Data Report  
Unocal Service Station #5487  
28250 Hesperian Boulevard  
Hayward, California

FILE #	5487	SS	<input checked="" type="checkbox"/>	BP	<input type="checkbox"/>
RPT	QM	<input checked="" type="checkbox"/>	TRANSMITTAL	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6

Dear Ms. Berry:

This data report presents the results of the most recent quarter of monitoring and sampling of the monitoring wells at the referenced site by MPDS Services, Inc.

#### RECENT FIELD ACTIVITIES

The monitoring wells that were monitored and sampled during this quarter are indicated in Table 1. Prior to sampling, the wells were checked for depth to water and the presence of free product or sheen. The monitoring data and the ground water elevations are summarized in Table 1. The ground water flow direction during the most recent quarter is shown on the attached Figure 1.

Ground water samples were collected on August 3, 1995. Prior to sampling, the wells were each purged of between 8.5 and 14.5 gallons of water. Samples were then collected using a clean Teflon bailer. The samples were decanted into clean VOA vials and/or one-liter amber bottles, as appropriate, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory. MPDS Services, Inc. transported the purged ground water to the Unocal Refinery located in Rodeo, California, for treatment and discharge to San Pablo Bay under NPDES permit.

#### ANALYTICAL RESULTS

The ground water samples were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documentation. The analytical results of the ground water samples collected to date are summarized in Table 2. The concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline and benzene detected in the ground water samples collected this quarter are shown on the attached Figure 2. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this report.

LIMITATIONS

Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants.

DISTRIBUTION

A copy of this report should be sent to the Alameda County Health Care Services Agency, and the City of Hayward Fire Department.

If you have any questions regarding this report, please do not hesitate to call Mr. Nubar Srabian at (510) 602-5120.

Sincerely,

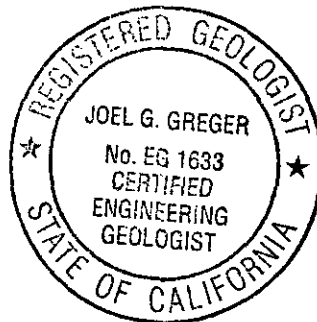
MPDS Services, Inc.



Sarkis A. Karkarian  
Staff Engineer



Joel G. Greger, C.E.G.  
Senior Engineering Geologist



License No. EG 1633  
Exp. Date 8/31/96

/jfc

Attachments:    Tables 1 & 2  
                  Location Map  
                  Figures 1 & 2  
                  Laboratory Analyses  
                  Chain of Custody documentation

cc: Mr. Thomas Berkins, Kaprealian Engineering, Inc.

**TABLE 1**

**SUMMARY OF MONITORING DATA**

Well #	Ground Water Elevation (feet)	Depth to Water (feet) ♦	Total Well Depth (feet) ♦	Product Thickness (feet)	Sheen	Water Purged (gallons)
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**(Monitored and Sampled on August 3, 1995)**

MW1	5.52	6.21	27.31	0	No	14.5
MW2	5.39	7.19	23.85	0	No	11.5
MW3	5.40	6.59	24.04	0	No	12
MW4	5.25	6.33	24.61	0	No	12.5
MW5	4.76	6.03	24.15	0	No	12.5
MW6	4.92	6.26	18.05	0	No	8.5

**(Monitored and Sampled on May 2, 1995)**

MW1*	6.08	5.65	27.31	0	--	0
MW2*	5.54	7.04	23.87	0	--	0
MW3*	6.29	5.70	24.03	0	--	0
MW4*	6.15	5.43	24.60	0	--	0
MW5	5.84	4.95	24.14	0	No	13.5
MW6	6.18	5.00	18.04	0	No	9

**(Monitored and Sampled on February 1, 1995)**

MW1*	6.56	5.17	27.33	0	--	0
MW2*	6.45	6.13	23.84	0	--	0
MW3*	6.44	5.55	23.96	0	--	0
MW4*	6.35	5.23	24.56	0	--	0
MW5	5.94	4.85	24.13	0	No	13.5
MW6	6.14	5.04	18.04	0	No	9

**(Monitored and Sampled on November 2, 1994)**

MW1*	4.66	7.07	27.34	0	--	0
MW2*	4.60	7.98	23.86	0	--	0
MW3*	4.57	7.42	24.06	0	--	0
MW4*	4.45	7.13	24.62	0	--	0
MW5	3.93	6.86	24.16	0	No	12
MW6	4.13	7.05	18.04	0	No	8

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TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

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<u>Well #</u>	<u>Well Casing Elevation (feet)**</u>
MW1	11.73
MW2	12.58
MW3	11.99
MW4	11.58
MW5	10.79
MW6	11.18

◆ The depth to water level and total well depth measurements were taken from the top of the well casings.

\* Monitored only.

\*\* The elevations of the top of the well casings are relative to Mean Sea Level (MSL), per the City of Hayward Benchmark (elevation = 10.97 feet MSL).

-- Sheen determination was not performed.

**TABLE 2**

**SUMMARY OF LABORATORY ANALYSES  
 WATER**

<u>Date</u>	<u>Well #</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>
8/03/95	MW1	--	ND	ND	ND	ND	ND
5/02/95	MW1	SAMPLED ANNUALLY					
2/01/95	MW1	SAMPLED ANNUALLY					
11/02/94	MW1	SAMPLED ANNUALLY					
8/02/94	MW1	--	ND	ND	ND	ND	ND
8/05/93	MW1	--	ND	ND	ND	ND	ND
8/04/92	MW1	--	ND	ND	ND	ND	ND
11/07/91	MW1	--	ND	ND	ND	ND	ND
8/02/91	MW1	--	ND	ND	ND	ND	ND
5/10/91	MW1	--	ND	ND	ND	ND	ND
2/11/91	MW1*	ND	ND	ND	ND	ND	ND
11/15/90	MW1*	ND	ND	ND	ND	ND	ND
8/29/90	MW1*	ND	ND	ND	ND	ND	0.74
5/16/90	MW1*	ND	ND	ND	ND	ND	ND
2/16/90	MW1*	ND	ND	ND	ND	ND	ND
11/14/89	MW1*	ND	ND	ND	ND	ND	ND
8/16/89	MW1**	ND	ND	ND	ND	ND	ND
4/26/89	MW1*	ND	ND	2.1	ND	ND	ND
8/03/95	MW2	--	ND	ND	ND	ND	ND
5/02/95	MW2	SAMPLED ANNUALLY					
2/01/95	MW2	SAMPLED ANNUALLY					
11/02/94	MW2	SAMPLED ANNUALLY					
8/02/94	MW2	--	ND	ND	ND	ND	ND
8/05/93	MW2	--	ND	ND	ND	ND	ND
8/04/92	MW2	--	ND	ND	ND	ND	ND
11/07/91	MW2	--	ND	ND	ND	ND	ND
8/02/91	MW2	--	ND	ND	ND	ND	ND
5/10/91	MW2	--	ND	ND	ND	ND	ND
2/11/91	MW2	--	ND	ND	ND	ND	ND
11/15/90	MW2	--	ND	ND	ND	ND	ND
8/29/90	MW2	--	ND	ND	ND	ND	ND
5/16/90	MW2*	ND	ND	ND	ND	ND	ND
2/16/90	MW2	--	ND	ND	ND	ND	ND
11/14/89	MW2*	ND	ND	ND	ND	ND	ND
8/16/89	MW2**	ND	ND	ND	ND	ND	ND
4/26/89	MW2*	ND	ND	ND	ND	ND	ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES  
 WATER

<u>Date</u>	<u>Well #</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>
8/03/95	MW3	--	ND	ND	ND	ND	ND
5/02/95	MW3	SAMPLED ANNUALLY					
2/01/95	MW3	SAMPLED ANNUALLY					
11/02/94	MW3	SAMPLED ANNUALLY					
8/02/94	MW3	--	ND	ND	ND	ND	ND
8/05/93	MW3	--	ND	ND	ND	ND	ND
8/04/92	MW3	--	ND	ND	ND	ND	ND
11/07/91	MW3	--	ND	ND	ND	ND	ND
8/02/91	MW3	--	ND	ND	ND	ND	ND
5/10/91	MW3	--	ND	ND	ND	ND	ND
2/11/91	MW3	--	ND	ND	ND	ND	ND
11/15/90	MW3	--	ND	ND	ND	ND	ND
8/29/90	MW3	--	ND	ND	0.52	ND	ND
5/16/90	MW3	--	ND	ND	ND	ND	ND
2/16/90	MW3	--	ND	ND	ND	ND	ND
11/14/89	MW3	--	ND	ND	ND	ND	ND
8/16/89	MW3	--	ND	ND	ND	ND	ND
4/26/89	MW3*	ND	ND	ND	ND	ND	ND
8/03/95	MW4	--	ND	ND	ND	ND	ND
5/02/95	MW4	SAMPLED ANNUALLY					
2/01/95	MW4	SAMPLED ANNUALLY					
11/02/94	MW4	SAMPLED ANNUALLY					
8/02/94	MW4	--	ND	ND	ND	ND	ND
8/05/93	MW4	--	ND	ND	ND	ND	ND
8/04/92	MW4	--	ND	ND	ND	ND	ND
11/07/91	MW4	--	ND	ND	ND	ND	ND
8/02/91	MW4	--	ND	ND	ND	ND	ND
5/10/91	MW4	--	ND	ND	ND	ND	ND
2/11/91	MW4	--	ND	ND	ND	ND	ND
11/15/90	MW4	--	ND	ND	ND	ND	ND
8/29/90	MW4	--	ND	ND	ND	ND	ND
5/16/90	MW4	--	ND	ND	ND	ND	ND
2/16/90	MW4	--	ND	ND	ND	ND	ND
11/14/89	MW4	--	ND	ND	ND	ND	ND
8/16/89	MW4	--	ND	ND	ND	ND	ND
4/26/89	MW4*	ND	ND	0.33	ND	ND	ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES  
 WATER

<u>Date</u>	<u>Well #</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>
8/03/95	MW5	--	ND	12	ND	0.70	ND
5/02/95	MW5	--	ND	7.5	0.51	1.2	1.6
2/01/95	MW5	--	170	11	ND	2.4	3.9
11/02/94	MW5	--	450	73	1.6	6.2	11
8/02/94	MW5	--	59	16	ND	2.4	3.1
5/02/94	MW5	--	170♦	38	0.73	8.5	8.4
2/07/94	MW5	--	180	22	ND	6.4	5.9
11/05/93	MW5	--	110	12	ND	2.3	2.3
8/05/93	MW5	--	530	210	0.62	54	44
5/03/93	MW5	--	260	35	ND	2.3	3.1
2/02/93	MW5	--	77♦	5.0	ND	1.2	1.3
11/05/92	MW5	--	120	16	ND	3.5	3.0
8/04/92	MW5	--	80	13	ND	4.5	6.9
5/05/92	MW5	--	170	45	0.48	9.0	6.8
2/05/92	MW5	--	120	20	ND	4.4	4.7
11/07/91	MW5	--	700	43	1.7	29	24
8/02/91	MW5	--	100	43	0.33	12	5.2
5/10/91	MW5	--	ND	ND	ND	ND	ND
2/11/91	MW5	--	58	23	ND	2.9	1.3
11/15/90	MW5	--	ND	ND	ND	ND	0.47
8/29/90	MW5	--	ND	0.70	ND	0.57	1.1
5/16/90	MW5	--	1,100	310	2.8	70	110
2/16/90	MW5	--	ND	ND	ND	ND	ND
11/14/89	MW5	--	73	4.7	0.97	2.9	16
8/31/89	MW5	--	910	120	7.1	50	53
8/16/89	MW5	--	4,400	1,400	84	200	950
4/26/89	MW5*	ND	ND	ND	ND	ND	ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES  
 WATER

<u>Date</u>	<u>Well #</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>
8/03/95	MW6	--	ND	0.76	ND	ND	ND
5/02/95	MW6	--	ND	5.7	ND	0.81	1.1
2/01/95	MW6	--	340	26	0.77	2.6	7.0
11/02/94	MW6	--	840	30	2.5	26	57
8/02/94	MW6	--	220	13	1.0	12	28
5/02/94	MW6	--	440♦	20	4.2	11	26
2/07/94	MW6	--	1,100	130	14	13	130
11/05/93	MW6	--	100	1.8	ND	0.79	2.2
8/05/93	MW6	--	230	25	1.6	12	29
5/03/93	MW6	--	520	47	2.6	33	48
2/02/93	MW6	--	400♦	66	5.5	32	13
11/05/92	MW6	--	300	16	2.3	14	14
8/04/92	MW6	--	540	12	7.9	35	110
5/10/91	MWD▲	--	ND	ND	ND	ND	ND

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appear to be a gasoline and non-gasoline mixture.

▲ MWD was a quality assurance duplicate water sample collected from well MW5.

\* Total Oil & Grease and all EPA method 8010 constituents were non-detectable.

\*\* TOG for the samples collected from MW1 and MW2 were 23 milligrams per liter (mg/L) and 7.4 mg/L, respectively. All EPA method 8010 constituents were non-detectable for both samples.

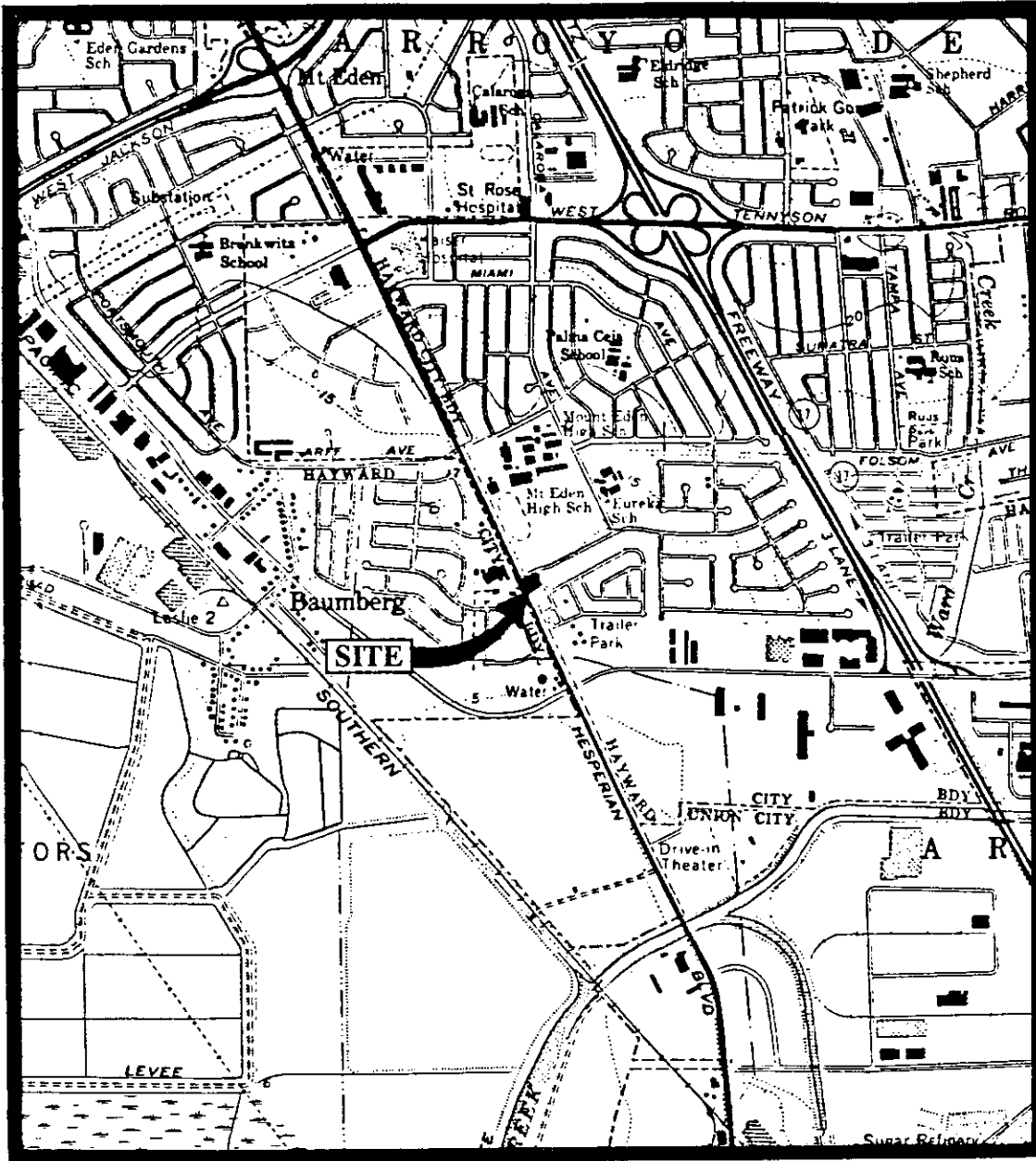
ND = Non-detectable.

-- Indicates that analysis was not performed.

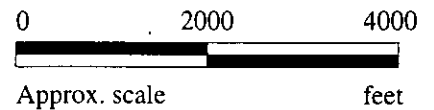
Results are in micrograms per liter (µg/L), unless otherwise indicated.

Note: Laboratory analyses data prior to February 7, 1994, were provided by Kaprealian Engineering, Inc.





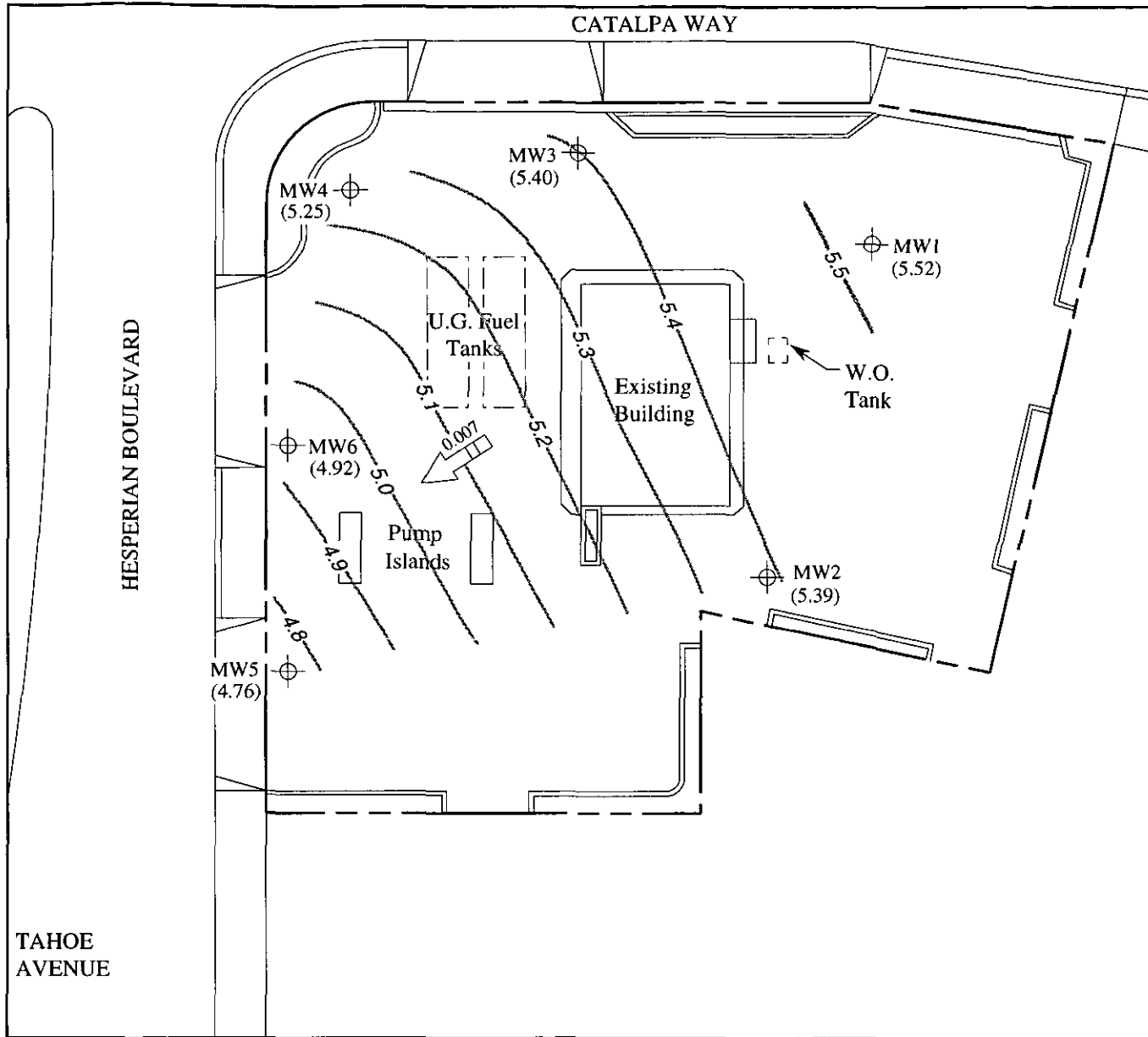
Base modified from 7.5 minute U.S.G.S.  
 Hayward & Newark Quadrangles  
 (both photorevised 1980)



**MPDS** SERVICES, INCORPORATED

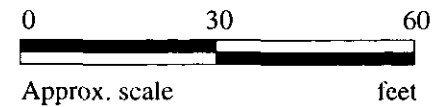
UNOCAL SERVICE STATION #5487  
 28250 HESPERIAN BOULEVARD  
 HAYWARD, CALIFORNIA

LOCATION  
 MAP



**LEGEND**

- ⊕ Monitoring well
- ( ) Ground water elevation in feet above Mean Sea Level
- ### → Direction of ground water flow with approximate hydraulic gradient
- Contours of ground water elevation

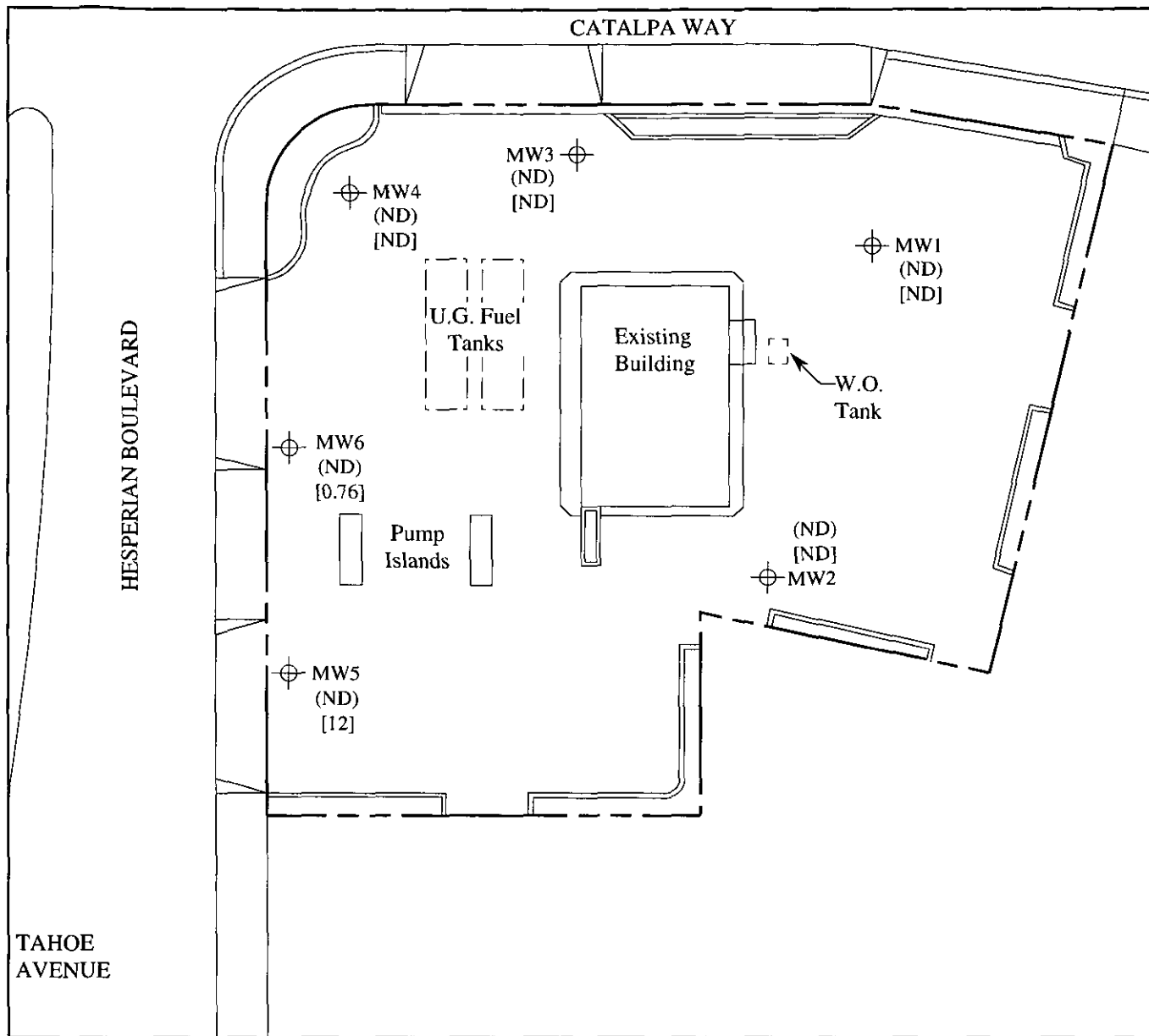


**POTENTIOMETRIC SURFACE MAP FOR THE AUGUST 3, 1995 MONITORING EVENT**

**mpds** SERVICES, INCORPORATED

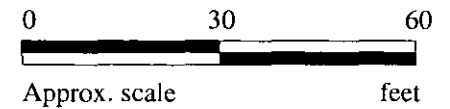
**UNOCAL SERVICE STATION #5487  
28250 HESPERIAN BOULEVARD  
HAYWARD, CALIFORNIA**

**FIGURE  
1**



**LEGEND**

- ⊕ Monitoring well
- ( ) Concentration of TPH as gasoline in µg/L
- [ ] Concentration of benzene in µg/L
- ND Non-detectable



**PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON AUGUST 3, 1995**

**mpds** SERVICES, INCORPORATED

**UNOCAL SERVICE STATION #5487  
28250 HESPERIAN BOULEVARD  
HAYWARD, CALIFORNIA**

**FIGURE  
2**



**Sequoia  
Analytical**

100 Chesapeake Drive  
104 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

MPDS Services  
2401 Stanwell Dr., Ste. 300  
Concord, CA 94520  
Attention: Sarkis Karkarian

Client Project ID: Unocal #5487, 28250 Hesperian Blvd.,  
Matrix Descript: Water Hayward  
Analysis Method: EPA 5030/8015 Mod./8020  
First Sample #: 508-0329

Sampled: Aug 3, 1995  
Received: Aug 3, 1995  
Reported: Aug 17, 1995

### TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons µg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Total Xylenes µg/L
508-0329	MW-1	ND	ND	ND	ND	ND
508-0330	MW-2	ND	ND	ND	ND	ND
508-0331	MW-3	ND	ND	ND	ND	ND
508-0332	MW-4	ND	ND	ND	ND	ND
508-0333	MW-5	ND	12	ND	0.70	1.1
508-0334	MW-6	ND	0.76	ND	ND	ND

<b>Detection Limits:</b>	<b>50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>
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Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard.  
Analytes reported as ND were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL, #1271**

Signature on File

Alan B. Kemp  
Project Manager

5080329.MPD <1>





**Sequoia  
Analytical**

30 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
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(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

MPDS Services 2401 Stanwell Dr., Ste. 300 Concord, CA 94520 Attention: Sarkis Karkarian	Client Project ID: Unocal #5487, 28250 Hesperian Blvd., Matrix Descript: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 508-0329	Sampled: Aug 3, 1995 Received: Aug 3, 1995 Reported: Aug 17, 1995
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**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION**

Sample Number	Sample Description	Chromatogram Pattern	DL Mult. Factor	Date Analyzed	Instrument ID	Surrogate Recovery, % QC Limits: 70-130
508-0329	MW-1	--	1.0	8/15/95	HP-4	102
508-0330	MW-2	--	1.0	8/15/95	HP-4	101
508-0331	MW-3	--	1.0	8/15/95	HP-4	102
508-0332	MW-4	--	1.0	8/15/95	HP-2	117
508-0333	MW-5	--	1.0	8/15/95	HP-2	109
508-0334	MW-6	--	1.0	8/15/95	HP-2	109

**SEQUOIA ANALYTICAL, #1271**

Signature on File

Alan B. Kemp  
Project Manager





**Sequoia  
Analytical**

10 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063 (415) 364-9600  
Walnut Creek, CA 94598 (510) 988-9600  
Sacramento, CA 95834 (916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

MPDS Services  
2401 Stanwell Dr., Ste. 300  
Concord, CA 94520  
Attention: Sarkis Karkarian

Client Project ID: Unocal #5487, 28250 Hesperian Blvd., Hayward  
Matrix: Liquid

QC Sample Group: 5080329-34

Reported: Aug 17, 1995

### QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
<b>Method:</b>	EPA 8020	EPA 8020	EPA 8020	EPA 8020
<b>Analyst:</b>	M. Creusere	M. Creusere	M. Creusere	M. Creusere

<b>MS/MSD</b>				
<b>Batch#:</b>	5080329	5080329	5080329	5080329
<b>Date Prepared:</b>	8/15/95	8/15/95	8/15/95	8/15/95
<b>Date Analyzed:</b>	8/15/95	8/15/95	8/15/95	8/15/95
<b>Instrument I.D.#:</b>	HP-4	HP-4	HP-4	HP-4
<b>Conc. Spiked:</b>	20 µg/L	20 µg/L	20 µg/L	60 µg/L
<b>Matrix Spike</b>				
<b>% Recovery:</b>	85	90	90	92
<b>Matrix Spike Duplicate %</b>				
<b>Recovery:</b>	100	105	105	107
<b>Relative % Difference:</b>	16	15	15	15

<b>LCS Batch#:</b>	2LCS081595	2LCS081595	2LCS081595	2LCS081595
<b>Date Prepared:</b>	8/15/95	8/15/95	8/15/95	8/15/95
<b>Date Analyzed:</b>	8/15/95	8/15/95	8/15/95	8/15/95
<b>Instrument I.D.#:</b>	HP-4	HP-4	HP-4	HP-4
<b>LCS % Recovery:</b>	106	112	113	113

<b>% Recovery Control Limits:</b>	71-133	72-128	72-130	71-120
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**Please Note:**

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

**SEQUOIA ANALYTICAL, #1271**

Signature on File

Alan B. Kemp  
Project Manager





MPDS Services  
2401 Stanwell Dr., Ste. 300  
Concord, CA 94520  
Attention: Sarkis Karkarian

Client Project ID: Unocal #5487, 28250 Hesperian Blvd., Hayward  
Matrix: Liquid

QC Sample Group: 5080329-34

Reported: Aug 17, 1995

**QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
<b>Method:</b>	EPA 8020	EPA 8020	EPA 8020	EPA 8020
<b>Analyst:</b>	M. Creusere	M. Creusere	M. Creusere	M. Creusere

<b>MS/MSD Batch#:</b>	5080332	5080332	5080332	5080332
<b>Date Prepared:</b>	8/15/95	8/15/95	8/15/95	8/15/95
<b>Date Analyzed:</b>	8/15/95	8/15/95	8/15/95	8/15/95
<b>Instrument I.D.#:</b>	HP-2	HP-2	HP-2	HP-2
<b>Conc. Spiked:</b>	20 µg/L	20 µg/L	20 µg/L	60 µg/L
<b>Matrix Spike % Recovery:</b>	125	125	130	128
<b>Matrix Spike Duplicate % Recovery:</b>	110	110	115	115
<b>Relative % Difference:</b>	13	13	12	11

<b>LCS Batch#:</b>	1LCS081595	1LCS081595	1LCS081595	1LCS081595
<b>Date Prepared:</b>	8/15/95	8/15/95	8/15/95	8/15/95
<b>Date Analyzed:</b>	8/15/95	8/15/95	8/15/95	8/15/95
<b>Instrument I.D.#:</b>	HP-2	HP-2	HP-2	HP-2
<b>LCS % Recovery:</b>	102	101	106	106

<b>% Recovery Control Limits:</b>	71-133	72-128	72-130	71-120
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**Please Note:**  
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

**SEQUOIA ANALYTICAL, #1271**



Signature on File

Alan B. Kemp  
Project Manager



**CHAIN OF CUSTODY**

5598057

SAMPLER		UNOCAL		ANALYSES REQUESTED										TURN AROUND TIME:		
STEVE BALIAN		S/S # <u>5487</u> CITY: <u>HAYWARD</u>												REGULAR		
WITNESSING AGENCY		ADDRESS: <u>28250 HESPERIAN BL</u>		TPH-GAS	TPH-DIESEL	TOG	8010							REMARKS		
SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010					
MW-1	8-3-95	11:00	X	X		2	WELL	X						5080329	A-B	
MW-2	"	11:30	X	X		2	"	X						5080330		
MW-3	"	12:00	X	X		2	"	X						5080331		
MW-4	"	12:25	X	X		2	"	X						5080332		
MW-5	"	13:25	X	X		2	"	X						5080333		
MW-6	"	13:00	X	X		2	"	X						5080334		
RELINQUISHED BY:		DATE/TIME		RECEIVED BY:			DATE/TIME		THE FOLLOWING <u>MUST BE</u> COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:							
STEVE BALIAN		16:10					8/3		1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? <u>Yes</u>							
(SIGNATURE)		8-3-95		(SIGNATURE)			1610		2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? <u>Yes</u>							
(SIGNATURE)				(SIGNATURE)					3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? <u>No</u>							
(SIGNATURE)				(SIGNATURE)					4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? <u>Yes</u>							
(SIGNATURE)				(SIGNATURE)					SIGNATURE:  TITLE: <u>Analyst</u> DATE: <u>8/3</u>							

**note:** All water containers to be sampled for TPHG/BTEX, 8010 & 8240 are preserved with HCL. All water containers to be sampled for Lead or Metals are preserved with HNO3. All other containers are unpreserved.